

**REMARKS**

**Status of the Application & Formalities**

Claims 1-43 are all the claims pending in the application. By this amendment Applicants are adding new claims 44-51.

**Rejections Under 35 U.S.C. § 112**

Claims 42 and 43 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants respectfully submit that the features of claims 42 and 43 are fully supported by the original disclosure of the current application.

Claim 42 recites that “the transmission element is attached to a middle portion of the cantilever spring and the actuating member is attached to a distal end of the cantilever spring.” Referring to the exemplary embodiment shown in Figures 4 and 5, the original disclosure of the current application discloses a transmission element 34 attached to a middle portion of a cantilever spring 32 (see region near element 31) and an actuating member 35 attached to a distal end of the cantilever spring 32. (*See also*, original specification, page 9, line 23 to page 11, line 20.) As such, the features recited in claim 42 are fully disclosed by the original disclosure of the current application.

Claim 43 recites “a second spring disposed between the cantilever spring and the transmission element; wherein the cantilever spring and the second spring are configured such that the cantilever spring is displaced before the second spring.” Referring to the exemplary embodiments shown in Figures 3 and 4 again, the original disclosure of the current application discloses a second spring 33a, 33b, disposed between the cantilever spring 32 and the

transmission element 34. Furthermore, the written description states that after the arm 32 is displaced a certain distance, “[t]he more flexible part of arm 32 is then locked, and continuation of the actuation distance of dispensing device B is possible through flexion of the least flexible part of arm 33 as can be seen in figure 7.” (Original specification, page 10, lines 8-11.) Again, the features recited in claim 43 are fully disclosed in the specification.

**Summary of Art Rejections**

1. *Claims 1-43 are provisionally rejected on the ground of non-statutory obviousness-type double patenting over claims 1-19 of co-pending Application No. 10/564,315.*
2. *Claims 1-23 are provisionally rejected on the ground of non-statutory obviousness-type double patenting over claims 1-19 of co-pending Application No. 10/542,507.*
3. *Claims 1-23 are provisionally rejected on the ground of non-statutory obviousness-type double patenting over claims 1-26 of co-pending Application No. 11/587,442.*
4. *Claims 1, 15, 16, 19-21, 31-33, 36, 37 and 41 are rejected under 35 U.S.C. § 102(b) as being anticipated by Klein (5,482,030).*
5. *Claims 1, 15, 16, 19-21, 31-33, 36-38, 40 and 41 are rejected under 35 U.S.C. § 102(b) as being anticipated by Horlin (WO 01/37909).*
6. *Claims 1, 15, 16, 19-21, 31-33, 36-38, 40 and 41 are rejected under 35 U.S.C. § 102(e) as being anticipated by Quyang et al (7,407,066).*

**Provisional Obviousness-Type Double Patenting Rejections**

1. *Claims 1-43 over claims 1-19 of co-pending Application No. 10/564,315.*

Since this is a provisional double patenting rejection, Applicants are deferring to address this rejection at this time.

2. *Claims 1-23 over claims 1-19 of co-pending Application No. 10/542,507.*

Since this is a provisional double patenting rejection, Applicants are deferring to address this rejection at this time.

3. *Claims 1-23 over claims 1-26 of co-pending Application No. 11/587,442.*

Since this is a provisional double patenting rejection, Applicants are deferring to address this rejection at this time.

**Claim Rejections under 35 U.S.C. § 102**

4. *Claims 1, 15, 16, 19-21, 31-33, 36, 37 and 41 under Klein (5,482,030).*

Regarding independent claims 1, 21, and 41, Klein does not disclose at least the following features:

**Claim 1:** “wherein said dose indicator comprises amplification means adapted to amplify the movement of said transmission element (34) on each actuation, so that the movement of said actuating member (35) is greater than the movement of said transmission element (34);”

**Claim 21:** “wherein said dose indicator comprises amplification means adapted to amplify the movement of said transmission element on each actuation, so that the movement of said actuating means is greater than the movement of said transmission element;”

**Claim 41:** “a cantilever spring that amplifies the movement of the transmission element during each actuation, so that the displacement of the actuating member is greater than the displacement of the transmission element.”

In rejecting independent claims 1, 21, and 41, the Examiner alleges that element 42 of Klein discloses a “cantilever spring.” As an initial matter Applicants note that neither of claims 1 or 21 recite a cantilever spring and should not be limited to this exemplary embodiment. Nevertheless, Klein does not disclose at least amplification means or a cantilever spring as recited in independent claims 1, 21, and 41, respectively.

Rather than being a “cantilever spring” as alleged by the Examiner, element 42 is a series of “counter plunger rollers” that are simply provided to guide the counter plunger 40 during actuation. (*See* Klein, col. 14, lines 65-67 & col. 16, lines 1-8). As such, the counter plunger rollers of Klein do not provide any amplification of the displacement movement of the counter plunger distal end 38.

In view of the above, Klein does not disclose at least amplification means or an cantilever spring as recited in independent claims 1, 21, and 41, respectively.

Claims 15, 16, 19, 20, 31-33, 36, and 37 are allowable at least by virtue of their respective dependencies from independent claims 1 or 21.

5. *Claims 1, 15, 16, 19-21, 31-33, 36-38, 40 and 41 under Horlin (WO 01/37909).*

Regarding independent claims 1, 21, 38 and 41, Horlin does not disclose at least the following features:

**Claim 1:** “wherein said dose indicator comprises amplification means adapted to amplify the movement of said transmission element (34) on each actuation, so that the movement of said actuating member (35) is greater than the movement of said transmission element (34);”

**Claim 21:** “wherein said dose indicator comprises amplification means adapted to amplify the movement of said transmission element on each actuation, so that the movement of said actuating means is greater than the movement of said transmission element;”

**Claim 38:** “wherein the spring is shaped so that a given displacement of the transmission element causes a greater displacement of the actuation element;”

**Claim 41:** “a cantilever spring that amplifies the movement of the transmission element during each actuation, so that the displacement of the actuating member is greater than the displacement of the transmission element.”

In rejecting independent claims 1, 21, 38, and 41, the Examiner alleges that the tongues 30 in Horlin disclose the recited actuator member. The Examiner also alleges that the flat spring 33 of Horlin discloses a “cantilever spring.” Again, as an initial matter, Applicants note that none of independent claims 1, 21, or 38 recite a “cantilever spring” and they should not be limited to this particular exemplary embodiment. Nevertheless, Horlin does not disclose at least an amplification means, a spring shaped so that a given displacement of the transmission element causes a greater displacement of the actuation element, or a cantilever spring as recited in independent claims 1, 21, 38 and 41, respectively.

Horlin discloses a counter located outside the dispenser’s housing, with a control wheel 9 having a deformable pin 32 entering into the dispenser’s housing and co-operating with the spray container 4 during actuation. (See Horlin, FIG. 7.) Horlin explains that the axial movement of the spray container 4 causes “the part of the pin located inside the inhaler 1 [to be] deflected and/or angled in the downward direction,” which results in the pin on the outside of the inhaler 1 to be angled upward. (See Horlin, p. 13, lines 6-9 & 16-18; FIG. 7.) The flat spring 33 is located between the pin and the control wheel to compensate for the upward angle of the pin 32 and provide a recoil action for the control wheel 9. As such, the flat spring 33 does not amplify the movement of the pin 32 so that the tongues 30 move a greater distance than the pin 32.

Furthermore, the pin 32 and the tongues 30 are all located on the periphery of the control wheel 9, and the movement of the pin 32 will be the same as or less than the movement of the tongues 30. As such, there is no amplification of the movement of the tongues with respect to the pin 32, and the counting wheel 8 would move the same distance as the control wheel 9 during actuation of the dispenser.

In view of the above, Horlin does not disclose all of the features recited in independent claims 1, 21, 38, or 41.

Claims 15, 16, 19, 20, 31-33, 36, 37, and 40 are allowable at least by virtue of their respective dependencies from independent claims 1, 21 or 38.

6. *Claims 1, 15, 16, 19-21, 31-33, 36-38, 40 and 41 under Qiyang et al (7,407,066).*

Regarding independent claims 1, 21, 38 and 41, Ouyang does not disclose at least the following features:

**Claim 1:** “wherein said dose indicator comprises amplification means adapted to amplify the movement of said transmission element (34) on each actuation, so that the movement of said actuating member (35) is greater than the movement of said transmission element (34);”

**Claim 21:** “wherein said dose indicator comprises amplification means adapted to amplify the movement of said transmission element on each actuation, so that the movement of said actuating means is greater than the movement of said transmission element;”

**Claim 38:** “wherein the spring is shaped so that a given displacement of the transmission element causes a greater displacement of the actuation element;”

**Claim 41:** “a cantilever spring that amplifies the movement of the transmission element during each actuation, so that the displacement of the actuating member is greater than the displacement of the transmission element.”

In rejecting independent claims 1, 21, 38, and 41, the Examiner alleges that the deformable teeth 51 and 52 in Ouyang disclose a cantilever spring. Again, none of claims 1, 21, or 38 recite a cantilever spring, and none of these claims should be limited to this exemplary embodiment. Nevertheless, Ouyang does not disclose at least an amplification means, a spring shaped so that a given displacement of the transmission element causes a greater displacement of

the actuation element, or a cantilever spring as recited in independent claims 1, 21, 38 and 41, respectively.

In Ouyang, elements 51 and 52 are deformable teeth that are directed upwardly and downwardly out of the disc 50. (See Horlin, col. 2, line 65 to col. 3, line 1.) In Ouyang, during actuation, the axial movement of the bearing plate 42 compresses the deformable teeth 51 and 52, which in turn provides rotation of the indicator wheel 40. Therefore, the teeth 51 and 52 are the actuating members, and there is no amplification of the movement of said teeth with respect to the axial displacement of the bearing plate 42 - the teeth are axially depressed exactly the same distance that the bearing plate 42 is axially displaced. Therefore, the deformable teeth 51 and 52 do not disclose any of the amplification means, spring, or cantilevered spring as recited in independent claims 1, 21, 38, and 41.

In view of the above, Ouyang does not disclose all of the features recited in independent claims 1, 21, 38, or 41.

Claims 15, 16, 19, 20, 31-33, 36, 37, and 40 are allowable at least by virtue of their respective dependencies from independent claims 1, 21, or 38.

#### **New Claims**

For additional claim coverage merited by the scope of the invention, new claims 44-51 are being added. Claims 44-51 are allowable at least by virtue of their respective dependencies from independent claims 1, 21, 38, or 41.

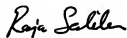
#### **Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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**23373**

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